

NOTICE OF ALLOWANCE

1. This is in response to application No. 10/549427 filed nationally on 13 October 2005 and internationally on 12 February 2005.

Priority

2. Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Japan on 03 February 2004. It is noted, however, that applicant has not filed a certified copy of the JP 2004-026454 application as required by 35 U.S.C. 119(b).

Reasons for Allowance

3. The following is an examiner's statement of reasons for allowance:

Applicant's claim amendments and arguments, filed in the response dated 22 February 2010, regarding the rejections under 35 USC 112 and 103(a) have been fully considered and are persuasive. All outstanding rejections under 35 USC 103(a) are hereby withdrawn.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

EXAMINER'S AMENDMENT

4. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Timothy Hirzel (61141) on 07 September 2011.

Title:

Please replace the Title with the following rewritten Title:

DISTRIBUTING PROCESSING APPARATUS, METHOD, AND SYSTEM

Claims:

The claim listing beginning on the next page shall replace all prior versions of the claims.

CLAIM LISTING

Claims 1-22 (canceled).

Claim 23 (currently amended): An information processing apparatus which is coupled to a plurality of other information processing apparatuses through a network, the information processing apparatus comprising:

a processor; and

a memory device storing instructions which when executed by the processor, causes the processor to:

~~capability exchange means for:~~

- (a) ~~collecting~~ collect information regarding resources and operating statuses of the other information processing apparatuses;
- (b) ~~creating~~ create an apparatus information table by:
 - (i) for each of the other information processing apparatuses, transmitting one of a plurality of first software cells to said other information processing apparatus, said transmitted first software cell including a direct memory access command, each of said other information processing apparatuses being configured to execute said transmitted direct memory access command, the apparatus information table including:
 - (A) apparatus data associated with all the other information processing apparatuses when the information processing apparatus is in a master status; and
 - (B) identifications associated with all the other information processing apparatuses and the master/slave statuses associated with all the other information processing apparatuses on the network when the information processing apparatus is in a slave status, the first software cells requesting transmissions of information regarding the

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other information processing apparatuses; and

- (ii) for each of the other information processing apparatuses, receiving one of a plurality of second software cells as a reply from said other information processing apparatus, said received second software cell including a status return command;
- (c) ~~exchanging~~ exchange information regarding capability with the other information processing apparatuses by transmitting one of the first software cells which includes information regarding own apparatus as the reply to the other information processing apparatus if the information processing apparatus receives one of the second software cells which requests the transmission of information regarding the information processing apparatus from the other information processing apparatus; and
- (d) upon connection to the network of an additional information processing apparatus which was not previously connected to the network, ~~collecting~~ collect classification identification information of said information processing apparatus, said classification identification information indicating at least one of a feature and a function of said information processing apparatus, wherein the apparatus data includes information processing apparatus identification information which is generated when powering on said information processing apparatus;

~~apparatus specifying means for:~~

- (~~ae~~) ~~comparing~~ compare information regarding a resource required to execute a function program, with information regarding the resource and the operating status in the apparatus information table; and
- (~~bf~~) ~~specifying~~ specify one of the information processing apparatuses capable of executing the function program if the function program retained in the information processing apparatus is executed; and

~~processing requesting means for transmitting~~

- (~~g~~) transmit one of the first software cells which requests an execution of the

function program to the specified information processing apparatus, ~~specified in the apparatus specifying means.~~

Claim 24 (currently amended): The information processing apparatus according to claim 23, wherein the instructions further cause the processor to:

~~the capability exchange means,~~ upon connection to the network of the additional information processing apparatus which was not previously connected to the network, ~~collects~~ collect information regarding a resource and an operating status of the additional information processing apparatus and ~~updates~~ update the apparatus information table.

Claim 25 (currently amended): The information processing apparatus according to claim 23, wherein:

the other information processing apparatus has a plurality of processors for processing the function program; and

~~the capability exchange means collects~~ the instructions further cause the processor to collect information regarding a resource and an operating status of each of the plurality of processors in the other information processing apparatus, and ~~saves~~ save the information in the apparatus information table.

Claim 26 (previously presented): A method of operating an information processing apparatus which is coupled to a plurality of other information processing apparatuses through a network, the method comprising:

- (a) collecting information regarding resources and operating statuses of the other information processing apparatuses;
- (b) creating an apparatus information table by:
 - (i) for each of the other information processing apparatuses, transmitting one of a plurality of first software cells to said other information processing apparatus, said transmitted first software cell including a direct memory access command, each of said other

information processing apparatuses being configured to execute said transmitted direct memory access command, the apparatus information table including:

- (A) apparatus data associated with the other information processing apparatuses when the information processing apparatus is in a master status; and
 - (B) identifications associated with the other information processing apparatuses and the master/slave statuses associated with the other information processing apparatuses on the network when the information processing apparatus is in a slave status, the first software cells requesting transmissions of information regarding the other information processing apparatuses; and
- (ii) for each of the other information processing apparatuses, receiving one of a plurality of second software cells as a reply from said other information processing apparatus, said received second software cell including a status return command;
- (c) exchanging information regarding capability with the other information processing apparatuses by transmitting one of the first software cells which includes information regarding own apparatus as the reply to the other information processing apparatus if the information processing apparatus receives one of the second software cells which requests the transmission of information regarding the information processing apparatus from the other information processing apparatus;
 - (d) upon connection to the network of an additional information processing apparatus which was not previously connected to the network, collecting classification identification information of said information processing apparatus, said classification identification information indicating at least one of a feature and a function of said information processing apparatus, wherein the apparatus data includes information processing apparatus

identification information which is generated when powering on said information processing apparatus;

- (e) comparing information regarding a resource required to execute a function program, with information regarding the resource and the operating status in the apparatus information table;
- (f) specifying one of the information processing apparatuses capable of executing the function program if the function program retained in the information processing apparatus is executed; and
- (g) transmitting one of the first software cells which requests an execution of the function program to the information processing apparatus specified.

Claim 27 (previously presented): The information processing method according to claim 26, further comprising, upon connection to the network of the additional information processing apparatus which was not previously connected to the network, collecting information regarding a resource and an operating status of the additional information processing apparatus and updating the apparatus information table.

Claim 28 (previously presented): The information processing method according to claim 26, further comprising collecting information regarding a resource and an operating status of each of the plurality of processors, and saving the information in the apparatus information table, wherein the other information processing apparatus has a plurality of processors for processing the function program.

Claim 29 (currently amended): An information processing system in which one information processing apparatus and another information processing apparatus are coupled through a network, the one information processing apparatus comprising:

a processor; and

a memory device storing instructions which when executed by the processor, causes the processor to:

~~capability exchange means for:~~

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- (a) ~~collecting~~collect information regarding resources and operating statuses of the other information processing apparatuses;
- (b) ~~creating~~create an apparatus information table by:
 - (i) for each of the other information processing apparatuses, transmitting one of a plurality of first software cells to said other information processing apparatus, said transmitted first software cell including a direct memory access command, each of said other information processing apparatuses being configured to execute said transmitted direct memory access command, the apparatus information table including:
 - (A) apparatus data associated with the other information processing apparatuses when the one information processing apparatus is in a master status; and
 - (B) identifications associated with the other information processing apparatuses and the master/slave statuses associated with the other information processing apparatuses on the network when the one information processing apparatus is in a slave status, the first software cells requesting transmissions of information regarding the other information processing apparatuses; and
 - (ii) for each of the other information processing apparatuses, receiving one of a plurality of second software cells as a reply from said other information processing apparatus, said received second software cell including a status return command;
- (c) ~~exchanging~~exchange information regarding capability with the other information processing apparatuses by transmitting one of the first software cells which includes information regarding own apparatus as the reply to the other information processing apparatus if the information processing apparatus receives one of the second software cells which request the transmission of information regarding the information

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processing apparatus from the other information processing apparatus;
and

- (d) upon connection to the network of an additional information processing apparatus which was not previously connected to the network, ~~collecting~~ collect classification identification information of said information processing apparatus, said classification identification information indicating at least one of a feature and a function of said information processing apparatus, wherein the apparatus data includes information processing apparatus identification information which is generated when powering on said information processing apparatus;

~~apparatus specifying means for:~~

- (~~ae~~) ~~comparing~~ compare information regarding a resource required to execute a function program, with information regarding the resource and the operating status in the apparatus information table; and
- (~~bf~~) ~~specifying~~ specify one of the information processing apparatuses capable of executing the function program if the function program retained in the information processing apparatus is executed; and

~~processing requesting means for transmitting~~

- (~~g~~) transmit one of the first software cells which requests an execution of the function program to the specified information processing apparatus, ~~specified in the apparatus specifying means.~~

Claim 30 (currently amended): The information processing system according to claim 29, wherein the instructions further cause the processor to:

~~the capability exchange means of the one information processing apparatus,~~
upon connection to the network of the additional information processing apparatus which was not previously connected to the network, ~~collects~~ collect information regarding a resource and an operating status of the other information processing apparatus and ~~updates~~ update the apparatus information table.

Claim 31 (currently amended): The information processing system according to claim 29, wherein:

the other information processing apparatus has a plurality of processors for processing the function program; and

~~the capability exchange means of the one information processing apparatus~~
~~collects~~the instructions further cause the processor to collect information regarding a resource and an operating status of each of the plurality of processors in the other information processing apparatus, and ~~saves~~save the information in the apparatus information table.

Claim 32 (previously presented): The information processing apparatus according to claim 23, wherein information processing apparatus identification information of the information processing apparatus is generated by the information processing apparatus based at least in part on one or more of: (i) a date; and (ii) a time, of powering on of the information processing apparatus.

Claim 33 (previously presented): The information processing apparatus according to claim 23, wherein, upon disconnection from the network of an information processing apparatus in a master status, at least one of the other information processing apparatuses in a slave status changes to a master status based, at least in part, on a comparison of the information processing apparatus identification information of said information processing apparatus which changes status and the information processing apparatus identification information of all the other information processing apparatuses.

Claim 34 (previously presented): The information processing method according to claim 26, wherein information processing apparatus identification information of the information processing apparatus is generated by the information processing apparatus based at least in part on one or more of: (i) a date; and (ii) a time, of powering on of the

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information processing apparatus.

Claim 35 (previously presented): The information processing method according to claim 26, further comprising determining, upon disconnection from the network of an information processing apparatus in a master status, at least one of the other information processing apparatuses in a slave status to change to a master status based, at least in part, on a comparison of the information processing apparatus identification information of said information processing apparatus which changes status and the information processing apparatus identification information of all the other information processing apparatuses; and

changing the determined information processing apparatus status to master status.

Claim 36 (previously presented): The information processing system according to claim 29, wherein information processing apparatus identification information of the information processing apparatus is generated by the information processing apparatus based at least in part on one or more of: (i) a date; and (ii) a time, of powering on of the information processing apparatus.

Claim 37 (previously presented): The information processing system according to claim 29, wherein, upon disconnection from the network of an information processing apparatus in a master status, at least one of the other information processing apparatuses in a slave status changes to a master status based, at least in part, on a comparison of the information processing apparatus identification information of said information processing apparatus which changes status and the information processing apparatus identification information of all the other information processing apparatuses.

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to JEFFREY NICKERSON whose telephone number is (571)270-3631. The examiner can normally be reached on M-Th, 9:00am - 7:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenton Burgess can be reached on (571)272-3949. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/J. N./
Examiner, Art Unit 2442

/Faruk Hamza/
Primary Examiner, Art Unit 2442